

IN THE CLAIMS:

01
1. (Previously Amended) A fusion protein having binding specificity for human interleukin-4 (IL4) which comprises complementarity determining regions (CDRs) obtained from a non-human neutralizing monoclonal antibody characterized by a dissociation constant equal to or less than 2×10^{-10} M for human IL4, and a first fusion partner.

2. (Original) The fusion protein according to claim 1 which is operatively linked to a second fusion partner.

3. (Currently Amended) The fusion protein according to claim 1 wherein said non-human neutralizing monoclonal antibody is selected from the group consisting of 3B9 and 6A1.

4. (Original) The fusion protein according to claim 2 wherein said second fusion partner comprises all or part of an immunoglobulin constant heavy chain, an immunoglobulin constant light chain, or both.

5. (Original) The fusion protein according to claim 1 wherein said first fusion partner sequence is the heavy chain sequence of: amino acids 21-50, 56-71, 88-119, and 131-141 of SEQ ID NO:12.

6. (Original) The fusion protein according to claim 1 wherein said first fusion partner sequence is the light chain sequence of: amino acids 20-42, 58-72, 80-111, and 121-131 of SEQ ID NO: 14.

7. (Previously Amended) The fusion protein according to claim 1 wherein the complementarity determining regions (CDRs) for the heavy chain comprise:

- (a) ThrSerGlyMetGlyValSer: SEQ ID NO:22,
- (b) HisIleTyrTrpAspAspAspLysArgTyrAsnPro-SerLeuLysSer: SEQ ID NO:24, or

(c) ArgGluThrValPheTyrTrpPheAspVal: SEQ ID NO:26.

8. (Currently Amended) The fusion protein according to claim 1 wherein the complementarity determining regions (CDRs) for the light chain comprise:

01 (a) LysLeuAlaSerGlnSerValAspTyrAspGlyAspSerTyrMetAsn:
SEQ ID NO:16,

(b) AlaAlaSerAsnLeuGluSer: SEQ ID NO:18, or

(c) GlnGlnSerAsnGluAspProProArg: SEQ ID NO:28.

9. (Previously Amended) The fusion protein according to claim 1 wherein the complementarity determining regions (CDRs) for the light chain comprise:

(a) LysAlaSerGlnSerValAspTyrAspGlyAspSerTyrMetAsn:
SEQ ID NO:16,

(b) AlaAlaSerAsnLeuGluSer: SEQ ID NO:18, or

(c) GlnGlnSerAsnGluAspProProThr: SEQ ID NO:20.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Previously Amended) A humanized antibody comprising a heavy chain and a light chain, said antibody characterized by a dissociation constant equal to or less than about 2×10^{-10} M for human IL4, wherein the framework regions of said heavy and light chains are obtained from at least one selected human antibody and the amino acid sequences of the complementarity determining regions of each said chain are derived from a non-human neutralizing monoclonal antibody specific for human IL4 characterized by a dissociation constant equal to or less than about 1×10^{-10} M for human IL4.

15. (Original) The antibody according to claim 14 wherein said antibody is optionally linked to an effector agent selected from the group consisting of a non-protein carrier molecule, polystyrene, and plastic beads.

C1
Conclude
16. (Previously Amended) A chimeric antibody comprising a heavy chain and a light chain, said antibody characterized by a dissociation constant equal to or less than about 2×10^{-10} M for human IL4, wherein the amino acid sequences of the complementarity determining regions of said heavy chain and said light chain are derived from a non-human neutralizing monoclonal antibody specific for human IL4 characterized by a dissociation constant equal to or less than about 2×10^{-10} M for human IL4.

17. (Original) A pharmaceutical composition comprising the fusion protein of claims 1 and a pharmaceutically acceptable carrier.

18. (Original) A method for treating allergies and other conditions associated with excess IgE production in a human which comprises the steps of administering to said human in need thereof an effective amount of the fusion protein of claim 1.

Claims 19-38: (Cancelled)